

July

Rural District of South
Westmorland



ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1957

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*To the Chairman and Members of the Rural District Council
of South Westmorland.*

SIR, LADIES AND GENTLEMEN,

I have the honour to submit to you my Annual Report upon the health of the Rural District during the year 1957.

I wish to acknowledge the help and ready co-operation of my colleague the County Medical Officer of Health, and also the assistance afforded to me by the local general medical practitioners.

I am indebted also to the Chief Public Health Inspector and his staff for the spirit of teamwork which exists in my department, and for the fund of local knowledge which they have laid at my disposal.

I have the honour to be,

Sir, Ladies and Gentlemen,

Your obedient servant,

FRANK T. MADGE,

Medical Officer of Health.

NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

Area of the Rural District in acres	151,007
Population (Registrar-General's mid-year estimate)	18,230
Inhabited houses	5,856
Rateable Value	£199,074
Product of a Penny Rate	£792
Rate in the Pound levied	17/4d.
of which the County Rate was	14/9d.

The Rural District of South Westmorland is a pleasant rolling countryside which rises from sea level in the south to nearly a thousand feet in the north. The shore-line extends for about 14 miles along the estuary of the River Kent, flat and marshy in the north, but with picturesque wooded slopes on the south.

The District is divided into three main valley areas by the two ridges of Scout Scar and Killington, which run north and south across the centre of the southern portion of Westmorland. On the west lie the Winster and Lyth valleys, in the middle lies the valley of the Kent, and on the extreme east lies the Lune Valley.

The dividing ridge of Scout Scar is sharp and barren, but the larger watershed which runs from Hutton Roof in the south to Whinfell in the north is rolling upland more suitable for agriculture. In the extreme north of the District is the high barrier of the central massif of Westmorland. These geographical features determine the natural lines of communication and therefore the spread of infectious disease.

The geology of the Rural District is sharply divided by the great fault which runs from Kendal in the north to Burton in the south-west and Kirkby Lonsdale in the south-east after branching near Crooklands. The country to the north-east of this fault consists of Kirkby Moor Flags in the Upper Ludlow Series of the Silurian System, with appreciable deposits of glacial drift. The rocks to the west of the fault are carboniferous limestones, with some of the Yoredale Series in the extreme south. The valleys contain much alluvial deposit and some glacial drift. These geological characteristics are of great significance in the supervision of water supplies, sewerage and occupational disease as well as affecting the economics of the District.

The climate is mild and equable, though invigorating on the uplands. The valleys are sheltered from the prevailing westerly winds, and their southern aspects provide full access to sunshine. Temperature gradient inversions are occasional in spring and autumn but are soon dispelled in the mornings. The rainfall varies between 40 and 50 inches a year and light falls of snow may be expected for one or two weeks in the late winter.

The District is mainly agricultural in character and many of the

small local industries and crafts are ancillary to agriculture. There are also the following industries which provide much employment and bring prosperity to the villages.

Paper Mills.	Wood Turning.
Woollen Mills.	Stone Quarries.
Mat Making.	Tarmacadam Manufacture.
Comb Making.	Cardboard Box Manufactory.
Milk Depots.	Condensed Milk Factory.
Furniture Factory.	Diatomaceous Earthworks.

In addition to these local industries the District receives seasonal tourist business at Arnside, Kirkby Lonsdale, and those northerly parts of the area which lie within the Lake District. The variety of these opportunities for local employment has stopped the drift from the countryside and has kept South Westmorland happily free from unemployment which is a most important factor in the maintenance of public health.

STAFF.

Name.	Qualifications.	Office.	Whole or Part Time.	Other Offices.
Madge, F. T.	M.D., Ch.B., M.R.C.S., L.R.C.P., D.P.H.	Medical Officer of Health	Part	M.O.H. Combined County Districts of Westmorland
Ball, G. H.	M.A.P.H.I., M.R.S.A.	Chief Public Health Inspector and Housing Manager	Part	Building Surveyor
Shepherd, D.	F.A.P.H.I., F.F.S.	Additional Public Health Inspector	Part	Public Health Inspector to Windermere U.D.
Aldersley, W. H.	M.A.P.H.I.	Additional Public Health Inspector	Whole	
Moss, H.	—	Clerk	Whole	—
Beveridge, K. A.	—	Clerk	Whole	—
Machell, B. M.	—	Clerk to Medical Officer of Health	Part	Clerk to M.O.H. Combined County Districts of Westmorland

Staff Changes.

There were no staff changes during the year.

COMMITTEES.

The Minister of Health requires me to include a list of your Council's committees which are concerned with matters of public health.

The Public Health Committee deal with the principal matters, but there are other aspects of public health importance which are dealt with by the Water and Housing Committees.

VITAL STATISTICS.

The following extracts are made from information supplied by the Registrar-General, with figures for 1956 for comparison.

Area of the District in acres 151,007

	1956	1957
Estimated civilian population (mid year) ..	18,170	18,230
Live Births. Legitimate— males	114	128
females	100	109
Illegitimate— males	9	8
females	10	7
Total	233	252
Crude Rate per 1,000 population	12.8	13.8
Corrected Rate per 1,000 population	13.9	14.04
Rate for England and Wales ..	15.7	16.1
Still Births. Legitimate— males	2	4
females	4	3
Illegitimate— males	—	2
females	—	—
Total	6	9
Rate per 1,000 total (live and still) births	25.1	34.5
Rate for England and Wales ..	23.0	22.4

	1956	1957
Deaths. males	105	124
females	117	106
Total	222	230
Crude Rate per 1,000 population ..	12.2	12.6
Corrected Rate per 1,000 population	10.9	11.3
Rate for England and Wales ..	11.7	11.5
Infantile Deaths (under 1 year):		
Legitimate	1	4
Rate per 1,000 legitimate live births	4.4	16.4
Illegitimate	—	—
Rate per 1,000 illegitimate live births	—	—
Total deaths under 1 year	1	4
Rate per 1,000 live births	4.2	15.8
Rate for England and Wales ..	23.8	23.0
Neo-natal Deaths (under 1 month):		
Total neo-natal deaths	1	3
Rate per 1,000 live births	4.7	11.9
Rate for England and Wales	16.9	16.5
Maternal Mortality:		
Total Deaths	—	—
Rate per 1,000 total (live and still)		
births	—	—
Rate for England and Wales ..	0.56	0.47

Deaths from certain causes:—	1956	1957.
Cancer	44	41
Measles	Nil	Nil
Whooping Cough	Nil	Nil

The main causes of death were:—

Heart Disease	75
Cancer	41
Vascular lesions of nervous system	30

COMMENTARY ON THE VITAL STATISTICS.

The 1951 Census revealed a population of 17,776 persons which was 228 more than in the same area in 1931, and reflects a very stable total population, although it masks the effect of migration. The census showed that only about 55 per cent of the people in Westmorland were born in the County. The greatest invasion, particularly in South Westmorland, was from Lancashire, some 14 per cent overall.

A proper perspective cannot be obtained by considering merely one year's changes. It is the general trend of population which is important for the planning of your future housing, water and sewerage requirements, and for the broader issues of the economic prosperity of your District.

Before the second World War you were a declining community, not only showing less births than deaths, but also drifting steadily each year out of the countryside. For the past decade you have maintained your population by your own reproduction and I hope this encouraging sign will continue.

I believe that the setting up of a better basis for agriculture in the national economy has checked the drift from the countryside, and has encouraged your young folk to renew their faith in country life by settling down and undertaking the responsibility of a family.

The 1951 Census also showed that there was a daily tidal flow of 2,195 people in and out of your District, made up of 1,349 residents who go elsewhere to work, and 846 outsiders who come into South Westmorland by day. The figures illustrate to some extent your provision of dormitories for Kendal's over-spill. 900 of your inhabitants go every day to work in the Borough, and another 302 commute into Lancashire. On the other hand Kendal sends 570 of its residents out into South Westmorland to work. The remainder of the immigrant commuters come from Lancashire and other foreign parts.

This daily interchange of talent probably reflects the rigidity of housing policy, and no doubt offers a glimpse of broader horizons and a wider range for the choice of marriage partners. Such population movements are of very significant importance in maintaining the public health.

Birth Rate.

Your birth rate was below the national average for the second successive year, but this is probably a transitory phase. The general trend of recent years has shown a steady increase.

Still Birth Rate.

Your still birth rate was too high. I would like to see it less.

Death Rate.

Your corrected death rate was below the national average. The proportion of old people in your community is likely to increase markedly during the next decade. It is problematical whether the death rate will catch up with them before the impact of ionising radiations overtakes the general population.

Infantile and Neo-natal Deaths.

Infantile deaths are deaths in children under the age of one year, and included in this figure are the neo-natal deaths which are deaths in children under the age of one month. This distinction helps to separate the deaths which are due to factors connected with pregnancy, child-birth, and abnormal development, which are more likely to cause death within the first month, from factors connected with infant management, which are likely to cause death between one month and one year. Your rate for 1957 was 15.8.

You will remember that in 1910 your rate was 120, during the first decade of this century it varied between 80 and 70, during the twenties it fell to between 60 and 50, and during the last few years it has been between 40 and 20. Your figures are too scanty to carry any great statistical significance, but as the trend runs parallel to that for England and Wales I consider that they reflect a very satisfactory improvement in child-care by the local doctors, nurses, and above all, by the young mothers in their homes. I hope that this happy state will continue.

The neo-natal deaths contain what we might call the hard core of "unavoidable" infant deaths. Many of these in the past have been due to prematurity, abnormality, or the result of difficult child-birth. It does not appear likely that science will be able to prevent developmental abnormalities, but there are high hopes that blood tests and the increased availability of obstetrical specialists will help to reduce the number of neo-natal deaths.

An advisory obstetric committee has been set up in Westmorland to co-ordinate the functions of the three divisions of the health service involved in midwifery, and to investigate the causes of still births and infant deaths.

Maternal Mortality.

There were no maternal deaths.

Cancer

Cancer has crept up into the second most frequent cause of death.

PREVALENCE AND CONTROL OF INFECTIOUS AND OTHER DISEASES.

Public Health Act, 1936. Sections 143-170.

National Health Service Act, 1946. Part III.

The general incidence of illness can be assessed by the weekly number of new claims for sickness benefit at our local National Insurance offices. A logarithmic graph of those figures shows a regular seasonal pattern over the years, and any variations are usually worth investigating.

Measles was the main feature of 1957. It had started in November of the previous year by spread from Kendal's large epidemic, and before that particular outbreak died away in the spring it had affected some 400 children in the South Westmorland villages surrounding Kendal, Staveley and the Lyth Valley. The summer was fairly free, but there were small outbreaks of measles again in the Lune Valley and in Arnside.

Whooping Cough claimed 63 cases, which was a pity because it is a preventable disease.

There was a sharp outbreak of Asian influenza during the autumn.

Perhaps the most dramatic episode of the year was an outbreak of Paratyphoid B infection in Arnside. 23 cases had been notified by the year end. The spread was quickly brought under control, but the clearance of the affected patients from infection was tediously slow. The people of Arnside bore many irksome restrictions with patience and fortitude, and I was most grateful for the untiring help given by the local doctors and all concerned.

It is pleasing to record that the notification of infectious disease has much improved in recent years, and I am very grateful to my colleagues in general practice for their prompt help in this respect. I look upon the control of notifiable diseases as one of the most important duties of our department. Patterns of thought change from time to time on these subjects, but the notifications provide the factual basis for controlling the spread of infections.

NOTIFIABLE DISEASES TABLE.

	Total	Ages												Admitted to Hospital	Deaths
		-1	1-	2-	3-	4-	5-	10-	15-	20-	35-	45-	65-		
Measles	382	9	21	33	37	40	191	39	5	5	1	1	-	1	-
Whooping Cough ..	63	3	3	10	6	8	26	4	-	-	1	-	2	1	-
Paratyphoid	23	1	-	-	-	1	3	2	1	3	3	4	5	5	-
Scarlet Fever	3	-	-	-	1	1	1	-	-	-	-	-	-	-	-
Acute Pneumonia ..	5	-	-	-	-	-	1	-	-	-	-	2	2	2	-
Erysipelas	3	-	-	-	-	-	-	-	-	-	-	1	2	1	-
Meningococcal Infection	2	-	1	-	-	-	1	-	-	-	-	-	-	2	-
Dysentery	1	-	-	-	-	1	-	-	-	-	-	-	-	-	-
Food Poisoning ..	1	-	1	-	-	-	-	-	-	-	-	-	-	1	-
TOTAL	483	13	26	43	44	51	223	45	6	8	5	8	11	13	-

TUBERCULOSIS.

Tuberculosis is the most important communicable disease of our time. Its prevention is primarily dependent upon social and economic factors in the general community, and secondarily upon the management of the established case. Your Council's functions are threefold; to investigate the source of infection, to prevent the spread of infection, and to remove conditions favourable to infection.

The number of tuberculosis patients at the year end were:—

Respiratory	...	...	...	...	...	71
Non-Respiratory	...	...	...	...	...	10
						—
						81
						—

TUBERCULOSIS TABLE.

Age Periods	NEW CASES				DEATHS			
	Respira- tory		Non-res- piratory		Respira- tory		Non-res- piratory	
	M	F	M	F	M	F	M	F
0 ..	—	—	—	—	—	—	—	—
1 ..	—	—	—	—	—	—	—	—
5 ..	—	—	—	—	—	—	—	—
15 ..	1	3	—	—	—	—	—	—
25 ..	3	2	—	—	—	—	—	—
35 ..	2	—	—	—	—	—	—	—
45 ..	—	2	—	—	—	—	—	—
55 ..	1	—	—	—	—	—	—	—
65 ..	1	—	—	—	1	—	—	—
Total ..	8	7	—	—	1	—	—	—

Hospital and Ambulance Arrangements for Infectious Diseases.

National Health Service Act, 1946. Parts II and III.

Hospital accommodation for infectious disease is provided by the Regional Hospital Board, Manchester, at Beaumont Hospital, Lancaster, a modern and well-equipped building within easy reach of this area under modern transport conditions.

Smallpox cases will be admitted to the Ainsworth Smallpox Hospital near Bury.

Ambulance transport for cases of infectious diseases is provided by the Westmorland County Council and is based in Kendal.

Disinfection Arrangements.

Steam disinfection of suitable articles has been available in the Borough of Kendal. In the more scattered parts of the District reliance has to be placed upon disinfection with formaldehyde.

HOUSING.

Under the Housing Acts your Council has a duty to consider the general housing conditions in your district, to ascertain whether any are unfit for human habitation, and to assess the need for further houses. You have powers to deal with unfit houses, powers to provide new houses for all classes, and various powers and duties in the management of your Council's estates. Good housing conditions are an integral part of public health.

Present Housing Position.

There were 5,856 inhabited houses at the end of the year. With an estimated population of 18,230 the average number of persons per house is 3.1 which is not a high figure. There were no cases of legal overcrowding within the strict definition of the Housing Act, which assumes that living rooms are used for sleeping purposes and that sexes can be segregated irrespective of age, health or family relationships. At the time of the 1951 Census there were 5,150 private households living in 5,058 structurally separate dwellings.

The great majority of cottage houses and farm-houses are of considerable age and are stone-built. Many of the older houses suffer from rising dampness due to the absence of damp-proof courses which cannot be remedied without extensive works in under-pinning. The sound methods of the original construction have ensured that deterioration of the structure is a very slow process, but heavy repair costs and low rentals have made housing repairs unprofitable.

Your Rural Housing Survey set out the details of your houses and showed that in those parishes where public services are available most of the houses are provided with modern amenities. Elsewhere they are lacking, but there are signs of steady improvement.

General Progress of Slum Clearance and Improvements.

Westmorland as a whole has made very encouraging progress in post-war slum clearance despite all the difficulties of the times. Since the campaign was resumed in 1948 well over 700 houses in the County have been dealt with by formal action under the Housing Acts. Most of these will eventually be demolished or converted to trade use, but about 15 per cent of them have been reprieved by their owners undertaking to spend considerable money for comprehensive reconditioning up to modern standards. In addition to those formal actions there have been a very creditable number of informal schemes for the renovation of sub-standard houses, either with the aid of improvement grants or entirely by private enterprise. The aim is to save a house wherever possible, but if it cannot be brought up to an acceptable standard of safety, decency and amenity, the sooner it is swept away the better.

In your own District very good progress has been made in slum clearance, over a hundred actions have been successful, and I feel that we have broken the back of the problem in this area.

Rural slums may be more picturesque than city slums, escape into the beautiful countryside may be easier, but within the four walls of a house the distinction is not so evident. The natural decay of houses is inevitable, the demand for the decencies of modern amenities is pressing. A policy of constant replacement has always obtained, otherwise we would still be living in mud and wattle huts.

The Housing Repairs and Rents Act 1954, required your Council to declare their proposals for dealing with sub-standard houses. You resolved to deal with the estimated 250 unfit houses within the next 10 years. The Minister of Housing and Local Government approved the proposals, and they are now on deposit for public inspection. Incidentally you have made a flying start with the programme. Appendix "B" at the end of this Report shows the progress made in each Parish.

Closing Orders.

Housing Act, 1957. Section 18.

Local Government Act, 1953. Section 10.

Three closing orders were made during the year. There were 30

closing orders in force at the year end, and included in this figure were 13 orders which have not yet been complied with and are still in occupation.

Undertakings not to use for Human Habitation.

Housing Act, 1957. Section 16.

One formal undertaking, and one informal, were accepted by your Council during the year. At the year end the number of such undertakings in force was 64, and 25 of these houses were still occupied. Two houses were reconditioned and the undertaking cancelled. One house was demolished.

Undertakings to Perform Works.

Housing Act, 1957. Section 16.

Two undertakings were offered during the year and the number outstanding at the year end was eight.

Four undertakings were satisfied during the year by the completion of reconditioning works. A closing order was substituted for one undertaking on failure to complete the promised works.

Demolition Orders.

Housing Act, 1957. Section 16.

Two demolition orders were made during the year, and at the year end the number of outstanding orders was 21 of which 11 related to houses which were still occupied. Eight houses were actually demolished during the year. One order was revoked upon submission of an undertaking to make the house fit by reconditioning works.

Clearance Areas.

Housing Act, 1957. Section 42.

During 1952 I made Official Representations against two areas of sub-standard property in Staveley. One area included the six cottages in Alec Row and the other was composed of two houses in The Square. Your Council decided to proceed by compulsory purchase orders, and, after a Public Enquiry in 1953, the Minister confirmed the order. At the year end two of the houses in Alec Row and one in The Square were still occupied.

In 1955 I made an Official Representation against a small area at Bridge End, Old Hutton, a jumble of decaying property on a site where satisfactory reconditioning would be both difficult and costly. Formal Inquiry was held during 1956 by the Minister of Housing and Local Government in to your Council's clearance order, and the latter was confirmed with modifications to exclude certain premises. At the year end two of the houses at Bridge End were still occupied.

Improvement Grants.

Housing Act, 1949.

If the process of natural decay is not allowed to go too far there are often opportunities for reconditioning to modern standards. The Housing Act, 1949, offers considerable financial aid to owners for reconditioning houses. I hope that full advantage will be taken of these opportunities so that houses will not be unnecessarily lost and the architectural traditions of the district may be maintained.

The administration of this Act has taken up much time but considerable progress has been made.

Of the 233 applications made for grant up to 31st December, 1957, 197 have been approved and 28 refused. 183 schemes have been completed and 10 others are actively progressing. So far as completed schemes are concerned, grants made total £44,768 up to 31st March, 1958, the end of the financial year 57/58.

Estimated Requirement for New Houses.

Housing Act, 1936. Section 71.

You will remember that your post-war demand was estimated to be about 1,100, made up of about 350 condemned and condemnable houses and about 570 needed for agricultural workers, and for the provision of a house for each family unit.

By the end of 1957, 1,013 houses had been built by the combined effort of your Council and private enterprise, and a further four were under construction.

It is not so easy to estimate future requirements because the picture is complicated by overspill from Kendal and by migration. The figures for dormitory use of your district are set out in the commentary on the vital statistics in this report. Furthermore, your immigration figures show how labour follows the houses and scope for expansion is largely in your own hands. One need is certain and constant, the replacement of sub-standard houses.

Housing Building Progress.

In 1948 your Council formulated a policy to build between 400 and 500 houses before the end of 1952, and the balance not covered by private enterprise in a subsequent five-year period. You completed 442 houses in the first period, plus another 160 by private enterprise.

That progress has continued, so that at the end of the current year you had completed 701. Private enterprise had then reached 307 completed and 17 under construction.

In other ways, 11 additional housing units were also provided by the conversion of existing buildings.

Selection of Tenants.

Selection of tenants for Council houses is done on a points basis. Briefly, the system consists of a single initial application form used for filing and reference: when houses in the District in which the applicant requires accommodation are nearing completion a further form is sent requiring extensive information. After seven or fourteen days the Housing Manager visits each applicant, the relevant facts are checked, he then makes the points award form. When all applicants have been visited a Sub-Committee consisting of the Chairman and Vice-Chairman of the Housing Committee, the local representatives and a representative of the agricultural interests meet, the applications are then considered on a points basis, no names being disclosed. The system appears to work reasonably satisfactorily.

Housing Management.

Your Council owned 774 occupied houses at the year end, and housing management in the District is under the control of the Chief Public Health Inspector and Building Surveyor, an arrangement which, in my opinion, is most satisfactory; it ensures that unsatisfactorily housed persons, who are either in sub-standard dwellings or grossly overcrowded are given due consideration and not overlooked. The arrangement also permits the technical officer most concerned having control of repairs and ensures that the property is well maintained. A modest start was made in providing direct labour for maintenance. Some of your Council's staff have been engaged on repairs, bricklaying, masonry, plastering and slating. The open spaces on your housing estates are difficult to maintain with the present staff and you may need to provide more help in the future. The rents of your Council houses vary from 12/- to 22/6d. per week, exclusive of rates, and the rateable values are between £9 and £26.

The examination of rentals and rates may not seem at first to have much to do with public health, but it does have considerable significance. It is not unknown for persons who have been rehoused from poor quarters into modern Council houses to have to pay their rents and rates from the portion of their income which rightly belongs to the purchase of food. Domestic economy can effect the general standard of the public health almost as much as environmental conditions, and some attempt must be made to maintain a balance between these conflicting factors.

Verminous Houses.

Public Health Act, 1936. Sections 83-85.

Two cases required action during the year.

Nuisances and Notices re Dwellings.

Public Health Act, 1936. Sections 91-100.

During the year the following action was taken: 88 preliminary notices and six statutory notices were served. In no case was it necessary to seek an Abatement Order from the Court.

Dangerous Buildings.

Public Health Act, 1936. Section 58.

Action was taken during the year in two cases.

Tents, Vans, Sheds and Moveable Dwellings.

Public Health Act, 1936. Sections 268-269.

There are 9 licensed camping sites in the Rural District, comprising three at Arnside, one at Storth, one at Levens, one at Hazelslack, one at Barker Knott, one at Underbarrow, and one at Slack Head.

Unlicensed camping sites are scattered throughout the area, but very little nuisance arises from casual campers' improvised sanitary arrangements and refuse disposal. Water is taken from polluted beckes at their own risk.

As this District is in or on the fringe of the National Park it is most desirable that strict but unobtrusive supervision should be exercised over camping sites, to ensure that the natural beauty of the country is not despoiled by the careless few.

Individual caravans licensed at the commencement of the year numbered 25. During the year 10 new licences were granted and six were withdrawn, leaving a total of 31 at the year end.

Caravans, sheds and other immobilised vehicles are difficult to supervise, and if undetected they constitute an undesirable precedent for the indiscriminate and unauthorised erection of shacks which are not in keeping with the amenities of the District and which seriously aggravate the sanitary administration. An attempt is being made to make licences reconcile with planning approval.

WATER SUPPLIES.

The water supply to your District is derived from many sources. The principal source of public supply is from your Lupton reservoirs, the mains from which extend into 19 parishes in the southern part of your area.

Your Council control and maintain other sources of supply in a further ten parishes. The Thirlmere and Haweswater aqueducts of Manchester Corporation pass through your District and are used for supplying some of the areas along their route. In two parishes some of the houses draw supplies from the mains of Kendal Corporation.

The principal supply of three parishes and a supplementary supply in one parish are owned by commercial undertakings. About one-fifth of the houses in your District is dependent upon private supplies from wells, adits, springs, stored rain water or small watercourses. No public or organised private supply whatever is available in 13 parishes.

It must be assumed that the supplies to all the above parishes are adequate. In a number of parishes very few houses are actually supplied from the sources named, but on the whole the general position has shown a steady and commendable improvement. About 92% of the houses in your District have a piped supply of some kind.

The quality of the public water supplies is generally good. The laboratory results of examinations and analyses of the ten public supplies are set out in Appendix "A". I have no official knowledge of the quality of the myriad of private supplies, and I suspect that many of them are unsatisfactory in quality and very variable in quantity. I can do no more than warn the users that they drink it at their own risk, that they should have it tested for purity at regular intervals, and, if in doubt, they should boil it.

Special measures were maintained to safeguard the purity of the public supplies.

The following is a brief review of your Council's public water supplies:

Lupton Supply.

The parishes supplied are Arnside, Beetham, Crosthwaite, Helsington, Heversham, Hincaster, Holme, Hutton Roof, Levens, Lupton, Meathop, Milnthorpe, Natland, Preston Patrick, Preston Richard, Sedgwick, Stainton, Underbarrow and Witherslack.

The supply is upland surface water impounded into two reservoirs. Barkin House reservoir has a capacity of 8 million gallons and a top water level of 630 feet O.D. The catchment area is open fell land, 332 acres, of which 104 acres are owned by your Council. The average rainfall over 14 years was 46.6 inches, and that of the three driest years 31.6 inches. Compensation water of 34,000 gallons per day has to be supplied.

The other reservoir is at Tarnhouse, with an available capacity of 36 million gallons, and a top water level of 595 feet O.D. The catchment

area is open fell land and some arable land, 217 acres, none of which is owned by your Council. The rainfall is the same as for Barkin House.

These waters are mixed and filtered through Bell's pressure filters, and are chlorinated before distribution into the mains system. The reservoir is used for fishing under your Council's licence. The quality of the treated water is good.

Staveley Supply.

The parishes are Hugill, Nether Staveley and Over Staveley. The source is spring water from a disused mine-working in the Kentmere valley. The water gravitates to an adit and is collected at 532 feet O.D. The water is untreated and is good in quality. The quantity is more than adequate, but the size of the main limits any great extension of the area to be served.

Kirkby Lonsdale Supply.

The source is from a water-bearing gravel bed at Fleet. The depth of the collecting chambers is about nine feet with a top water level of 330 feet O.D. The gathering ground is not defined but it is estimated to be at least 261 acres, of which your Council own one acre. The quantity of the supply has been abundant for some 70 years and the quality has generally been good except for plumbosolvent tendencies. The water passes untreated to the consumers. In 1957 there was a temporary deterioration in quality which seemed to be due to the beck overflowing its natural banks and thus contaminating our collecting chamber.

Casterton Supply.

The source is from springs of 480 feet O.D. and from surface waters. The quality is indifferent. The surface water component of this supply is undesirable drainage from pasture land and is used only when the yield of the springs fall below the demand. Chlorination was installed in 1952 and has improved the safety of this supply, but the whole system is a poor one and ought to be replaced by a safer and more constant source of supply. Perhaps the Haweswater aqueduct will meet the need.

Barbon Supply.

The source is from springs at 450 feet O.D. The quality is intermittently bad and the water is untreated. I made a detailed investigation of the supply, and recommended improvements to your Council for piping the fell runners near the road and this work was completed during 1951, but it can only be a partial remedy for a supply which

is intrinsically poor and which ought to be replaced by a safer source. It may be that the new Haweswater aqueduct could solve your Council's difficulties with the Barbon, Casterton and Kearstwick supplies, all of which I regard with misgivings. In the meantime your Council are planning to instal a chlorination plant.

Grayrigg Supply.

The source is partly from a small spring and partly from upland surface water from uninhabited fell grazing ground, some 57 acres in extent, none of which is owned by your Council. The water is collected in a small tank with a top water level of 670 feet O.D. and is untreated.

Just at the end of 1950 your Council altered the headworks to ensure that the supply was derived only from the small limestone spring, because fell drainage operations seemed to have aggravated the long-standing trouble of heavy sediment after rains.

After this work the appearance of the water showed great improvement, although it was considerably harder. In 1952, however, it was found that the lead in solution was 0.8 parts per million, which is about eight times the safe level. This seemed to be due to a vein of soluble lead in the limestone source, and in time it might have caused chronic lead poisoning.

The spring was therefore disconnected from the supply until an alternative satisfactory permanent scheme can be evolved.

Burneside Supply.

This private commercial supply has its sources in upland surface gathering ground on Potter Fell. The water is chlorinated and the results in recent years have been very satisfactory.

Kearstwick Supply.

This private supply derives from Terrybank Farm and gave trouble during 1951. The owners took prompt remedial action to extend the intake above the source of pollution and small chlorination plants are operated at two points on the system.

Some reconstruction of this system was effected by the owners following your Council's decision not to take it over in its present state. A future supply from the Haweswater aqueduct is envisaged.

Garth Row Supply.

This small scheme is upland surface water which was poor in quality. A large storage tank was constructed in 1948. It is proposed to take an alternative supply from the Haweswater aqueduct when available. In the meantime the supply runs so short that your Council often have to resort to the expensive and bothersome expedient of taking water in carts.

PUBLIC WATER SUPPLY DISTRIBUTION.

Year ended 31st December, 1957

Parish	Houses	Public Supply		Organised Private Supply		Other Private Supply	
		Laid on	Not Laid on	Laid on	Not Laid on	Laid on	Not Laid on
Arnside	478	472	—	—	—	3	3
Barbon	82	60	—	—	—	18	4
Beetham	339	316	—	—	—	2	21
Burton	226	220	5	—	—	1	—
Casterton	73	59	4	—	—	10	—
Crook	111	—	—	—	—	88	23
Crosthwaite	165	63	1	—	—	65	36
Dalton	25	19	—	—	—	5	1
Dillicar	25	—	—	—	—	12	13
Docker	13	—	—	—	—	10	3
Fawcett Forest..	12	—	—	—	—	11	1
Firbank	33	—	—	—	—	25	8
Grayrigg	53	31	—	—	—	12	10
Helsington	64	28	—	—	—	27	9
Heversham	144	142	1	—	—	—	1
Hincaster	35	30	—	—	—	4	1
Holme	213	207	6	—	—	—	—
Hugill	133	95	—	—	—	32	6
Hutton Roof....	60	35	5	—	—	12	8
Kentmere	37	—	—	—	—	29	8
Killington	42	—	—	—	—	37	5
Kirkby Lonsdale	476	417	1	—	—	50	8
Lambrigg	30	—	—	—	—	21	9
Levens	300	268	13	—	—	2	17
Longsleddale....	28	—	—	—	—	26	2
Lupton	56	39	3	—	—	13	1
Mansergh	40	—	—	—	—	35	5
Meathop	46	45	—	—	—	1	—
Middleton	42	—	—	—	—	36	6
Milnthorpe	553	532	21	—	—	—	—
Natland	99	88	—	—	—	10	1
Nether Staveley	226	190	6	—	—	25	5
New Hutton	59	4	—	—	—	46	9
Old Hutton	79	42	—	—	—	35	2
Over Staveley ..	184	140	21	—	—	20	3
Patton	15	—	—	—	—	9	6
Preston Patrick	123	93	—	—	—	28	2
Preston Richard	195	175	7	—	—	12	1
Scalthwaiterigg..	38	—	—	26	—	6	6
Sedgwick	51	29	18	—	—	4	—
Skelsmergh	73	35	—	7	—	27	4
Stainton	102	83	—	—	—	12	7
Strickland Ketel	302	6	—	235	3	25	33
Strickland Roger	86	3	—	52	4	22	5
Underbarrow ..	90	22	—	—	—	53	15
Whinfell	23	—	—	—	—	16	7
Whitwell & Selside	44	7	—	—	—	28	9
Witherslack	133	65	—	—	—	49	19
	5856	4060	112	320	7	1014	343

General.

Those supplies which show poor or indifferent bacteriological results are in the main due to the upland gathering grounds being grazed by stock, with the consequent manurial contamination of the water after rainfall. The bacterial counts fluctuate widely according to the climatic conditions, and as most of your public waters are untreated the contamination tends to be a nuisance in laboratory control rather than any particular danger to the consumers. Certain sources, however, require constant supervision against possible human pollution.

The shadow of amalgamation into a larger water board area lies across your undertaking. It is the government's policy to encourage voluntary combinations, but in many other parts of England compulsory powers are being used to create such water boards.

Proposed Future Water Schemes.

Additional Headworks.

Your Council considered that increased storage was required for the future expansion of the Lupton scheme, and a scheme for raising the dam at your Tarnhouse reservoir was examined at a Ministry Inquiry held during 1952. The Minister, however, favoured securing additional supplies from the Thirlmere aqueduct and a further programme of waste reduction. Your Council continued to press for their scheme and approval was granted in 1956. The scheme was undertaken during 1957 and will provide very welcome extra storage.

Crook.

An outline scheme for a small public water supply for a group of 35 houses in Crook was prepared and submitted to the Ministry of Health during 1950, but no real progress was made since and it seems that the scheme is now moribund.

Plantation Bridge.

In 1955 I drew your Council's attention to the deplorable state of many private water supplies in the hamlet. Some houses are served with untreated water from a dirty beck, just below other peoples sewage tanks. I have given local warning of the risks, and supported your Council's request to the Government that a remedial scheme should receive priority in spite of whatever credit squeeze happens to be in force at the moment. Your Council propose to extend the Staveley public water main to Plantation Bridge, and maybe sometime take it further on into the Burneside system. The situation has arisen through haphazard building development, and has progressively deteriorated. The present position is that the dangers persist while financial arguments drag on.

New Hutton.

A scheme has now been prepared and a start is anticipated during the summer of 1958.

SEWERAGE.

Public Health Act, 1936. Section 14.

Public sewers and disposal works exist in the more populous parts of twelve parishes, and in three other parishes there are systems installed by commercial undertakings. The rest of your District relies upon individual septic tanks, cesspools or drainage into watercourse, or still retains the more primitive practices associated with privies, privy middens, pails and earth-closets. This position is due to the lack or late installation of the public water supplies in these areas.

Your Council are fully aware of these deficiencies and are planning considerable extensions of the public sewerage system, and are improving, or replacing some of the existing disposal works which have become obsolete or inadequate for present and future requirements. Many areas will still have to await the public water supply before their insanitary conditions can be properly remedied.

Even when the public water supply arrives it will not be economically practicable to install comprehensive sewerage and full treatment sewage disposal plants, and the smaller villages or hamlets can be fairly well served by group septic tanks where the soil is suitable for irrigation with the effluent. Isolated houses must perforce rely upon this method of drainage.

Sewage Disposal Methods and Works.

Public Health Act, 1936. Section 15.

Arnside.

This plant consists of a tank on the shore fed by a sewer with a very poor fall, and embarrassed by tidal action. The effluent is discharged into the estuary and is often not of a very high standard. The whole of Morecambe Bay is, however, so grossly polluted with sewage that your contribution, although undesirable, is negligible in quantity. The sludge is pumped up to an old quarry at New Barns, where there are obsolete and inefficient so-called drying-beds. I do not like the Arnside arrangements and I would recommend that alternative arrangements should be adopted for sludge drying and disposal.

Staveley.

This is a modern plant situated near Hundhow on the Back Road to Burneside. It consists of detritus tanks, sedimentation tanks, rotary percolating filters, humus tanks, storm water tanks and sludge drying-beds. The effluent passes into the adjacent River Kent and is usually of good quality. I am satisfied that these works are capable of producing good results and are adequate for the anticipated growth of the area. It is proposed to extend the sludge drying-beds at an early date.

Kirkby Lonsdale.

These works are situated on the Whittington Road near Robrairie. The design is old-fashioned, and the results appear to be variable. There are detritus tanks, sedimentation tanks, and percolating filter beds from fixed sprinklers, storm water tanks, and sludge drying-beds. The effluent passes into the adjacent River Lune. This plant is decaying and I think it will be inadequate to deal with the new housing development in a few years. The Council prepared plans for the reconstruction of the works, but have not pressed forward with the project. In the meantime it is difficult to do more than patch up an aged plant, and try to placate the Lancashire Rivers Board who are constantly grumbling about the effluent.

Milnthorpe.

The new disposal works were brought into use during 1952 and are working well.

Beetham.

The new disposal works were brought into use in 1955 and are working well.

Burton.

A complete new set of sludge beds were constructed during 1956, enabling the sludge effluent to be pumped back for further treatment. This is a great improvement and helps to meet the criticisms of the Lancashire Rivers Board.

Other Works.

The other sewage disposal works are small installations at:—

Sedgwick	...	Riverside, Sedgwick.
Heversham	...	Marsh Lane, Heversham.
Endmoor	...	Challon Hall, Preston Richard.
Casterton	...	Kirfitt Hall, Casterton.
Holme	...	Mill Lane, Holme.
Holme Mills	...	One small tank scheme.
Levens	...	Three small tank schemes.
Storth	...	One small tank scheme.
Hutton Roof	...	One small tank scheme.
Whassett	...	One small tank scheme.
Mealbank	...	One small private scheme.

Some of these work fairly well, some require improvements and renovation, and some are obsolete.

Proposed New Sewerage Schemes.

Levens.

A sewerage scheme was prepared many years ago, but, due to various difficulties, it was not until 1955 that it came to the stage of Inquiry by the Minister. Although approved in principle, permission to start work was withheld on account of national financial restrictions.

Meanwhile Levens was suffering increasing difficulties. The extra load of new houses and the progressive clogging of the ground around the tank caused intermittent nuisance, and we settled down to a race between the cesspool emptying gang and the inhabitants of Levens, with no expense spared. A bigger and better tank was built during 1957, and, after the sewage effluent had flowed onto the road, the tail drain was extended to the lower side. Conditions are certainly a little better, but these are only stopgap measures until a proper disposal plant can be installed.

Crooklands.

A small scheme received Ministerial approval in 1956 and the work was carried out during 1957 to provide a much needed improvement.

Bowston.

Your Engineer submitted his plans for a small sewerage system at Bowston and your Council resolved to proceed with the scheme. It was approved in principle by the Minister of Housing and Local Government in 1951, subject to some modifications.

Preparations were being made at the year end for an early start in 1958.

Holme Mills.

The present tank is quite obsolete and cannot be economically operated without causing nuisance, so your Council propose to pump the sewage from this area into the Holme system, A scheme was approved by the Minister during the year and preparations were made for an early start.

Natland.

Your Council decided during 1951 to install a sewerage system in Natland and instructed the Engineer to submit a scheme. This was in course of preparation at the year end, but it has slipped down the priority list.

Cesspool Emptying.

Increased use was made of this service by private individuals, and the Council were saved many difficulties by having the cesspool emptying vehicle, with a mechanical pump, to deal with the sewage plants on their housing estates.

If the volume of this work increases further and anything like a full scale service has to be operated, consideration will have to be given in the near future for the provision of a vehicle specifically designed for the purpose. Over 200 cesspools were emptied during the year.

Small Schemes.

In such a scattered rural area the extension of many township and village systems would be impracticable, and therefore some small schemes will be needed to serve hamlets and small villages when water supplies are installed.

Prevalence of Water Closets.

At the time of the 1951 Census your District held 5,150 households, of whom 1,481 (or about 29%) were entirely without a water-closet, and another 214 had to share one. There has been steady improvement since the census was taken, but there are about 900 houses still with the more primitive arrangements.

In the post-war period the number of houses without a water-closet has dropped from 1,810 to 900. This is a very good achievement, although 15% of your houses are without because they are mostly in areas where no public sewers are available.

Improvements achieved during 1957.

Privy-closets and middens abolished and w.c's provided	...	56
Privy-closets and middens abolished and pails provided	...	1
Pail-closets abolished and w.c's provided	... ..	16
New septic tanks installed	... ..	58
Tanks emptied by the Department	... ..	203
Septic tanks abolished	... ..	Nil.

Notices served re Sanitary Accommodation and Drainage.

Insanitary privies and privy-middens	...	...	...	...	55
Defective sanitary pails	...	...	...	...	5
Insufficient drainage systems	...	...	...	...	87

Public Conveniences.

Public Health Act, 1936. Section 87.

Public conveniences are maintained in Arnside, Milnthorpe, Staveley and Kirkby Lonsdale. In all the conveniences constant supervision is required to deal with the public misuse to which they are subjected. It is a curious trend in public morals for toilets to be so defiled with careless excretion, obscene and perverted mural decorations, and so often damaged by wanton destruction of the actual fittings.

Conveniences are needed in all the populous villages, particularly to deal with the increasing motor-coach traffic. The systematic defiling of our village back streets and yards continues mainly because the visitors are offered no alternative. The present time is not opportune for embarking upon any extensive scheme of public lavatories, but I regard their ultimate provision as a much needed public health measure rather than a source of income to your Council.

The Staveley convenience was constructed during 1949 and is incorporated in a 'bus shelter and this pattern could be followed to great advantage elsewhere.

PUBLIC CLEANSING.

Refuse Collection.

Public Health Act, 1936. Section 72.

The refuse collection service covers all except the most outlying parishes in your District. In the more urbanised areas of the Kent and Lune valleys there is a weekly service. All pail-closets are also emptied weekly. Most of the remaining areas have a fortnightly collection.

Where regular collections are not economical, it has been possible for the refuse lorries to make an occasional tour along certain defined routes to collect from isolated hamlets and farms, after prior notice to the residents. Not only has this service been much appreciated, but it has reduced the casual indiscriminate dumping of refuse in roadside pits and quarries.

The ability of a large capacity waggon to clear a growing district has been clearly proved, together with the considerable advantage of dustless loading. The composition of refuse is changing, and it is now a problem of carrying bulk rather than weight. The 25 cubic yard vehicle has been so successful that your Council propose to buy a 16/18 cubic yard compression model when the obsolescent open lorry needs replacement.

Refuse Disposal.

Public Health Act, 1936. Section 76.

Disposal of refuse is carried out by tipping on six of your Council's sites. Since 1951 there has been a most commendable improvement in the introduction of controlled tipping as a gradual replacement of the crude dumping which was the former practice of your Council. Controlled tipping is difficult here, often there is neither sufficient labour on the sites nor sufficient covering material, with the result that occasional nuisances occur. The natural beauty of the countryside ought not to be desecrated by multiple dumps of ugly human refuse.

The wisdom of employing a full-time tip attendant at Slackhead has been well proved and has increased the quantity of refuse disposed of. The standard of maintenance on other tips has been kept up, but until more labour is available some shortcomings may occur. Fire is a constant risk, and a 700-gallon emergency water tank has been installed at Slack Head.

The more I see of the Kirkby Lonsdale tip the more I am convinced that it never ought to have been put there, and the sooner it is closed the better. It is now only partially used. Much improvement has been made lately to observe controlled tipping, and this technique is strictly obligatory for a tip which is sited so near to a large residential school.

Inspection re Refuse Collection, Accommodation and Disposal.

Inspections and visits re ashplace accommodation, complaints,
surveys, etc. 116

Notices served re Refuse Services:—

Number of notices server re accumulations	...	...	...	3
" " defective dustbins	...	...	...	27
" " insanitary ashpits	...	...	...	5

Salvage of Waste Material.

Salvage is not done because there is no sale for the material.

Street Cleansing.

Public Health Act, 1936. Section 77.

In the few areas where street cleansing is undertaken by your Council the streets are well maintained. The County Council undertake the remainder and maintain a similarly high standard.

FOOD AND DRUGS.

General Powers.

Food and Drugs Act, 1955.

Your Council bear most of the statutory responsibility for safeguarding the public from foodborne diseases. The main aim is directed towards securing proper and hygienic conditions for the manufacture, preparation and sale of food. The secondary aim is to trace and localise any outbreaks of disease which may occur in spite of preventive measures.

Precautions against Contamination.

Food and Drugs Act, 1955. Section 13-15.

Food Hygiene Regulations, 1955.

Food hygiene is steadily improving throughout your area. Public opinion is well ahead of the law and most traders are aware of the fact. The good food trader does not need official instruction in basic cleanliness or the enforcement of legal minimum standards. He may welcome advice on technical problems, but his aim is how high he can get, not how low he can get away with.

We have now passed the stage of educational approach. A small minority of food traders have remained untouched by years of hygiene propaganda, unmoved by conscience, and unwilling to believe that the law need apply to them as they pursue their unsweet ways. They are being dealt with in no uncertain fashion whenever they are reported.

The responsibility for safe food does not rest entirely with the trader as the housewife must play her part as well. Quite a lot of strange things happen to food between the shop counter and the dinner-plate, and the educational campaign has had to be carried into the home. Foodborne diseases, mild dysenteries and attacks of diarrhoea and vomiting are not infrequent in our homes and among our visitors. I am confident that higher standards will reduce these preventable diseases.

Ice-Cream Trade.

Food and Drugs Act, 1955. Section 16.

Ice-Cream (Heat Treatment, etc.) Regulations, 1947.

The following premises were registered under Section 14 of the Food and Drugs Act, 1938:—

Manufacture by hot mix, cold mix, storage and sale	...	4
Manufacture by cold mix, storage and sale	...	3
Storage and sale only	...	42

Prepared Meats.

Food and Drugs Act, 1955. Section 16.

The number of premises on the Register for the preparation of sausages, potted meat, preserved meat and pickled foods was 14.

Registration of Milk Distributors and Dairies which are not Dairy Farms.

Milk and Dairies Regulations, 1949.

Total number of registered Distributors	...	...	...	20
" " Dairies	...	...	...	3

There are estimated to be at least 250 retailers in your District, the majority of whom are producer-retailers, and the number of customers supplied varies from two or three to one hundred.

The retail distribution of milk is both by bottled milk and the old-fashioned loose method. Traders are becoming keener to meet the desire of the enlightened consumer for bottling. Milk-round vehicles are maintained generally in a clean condition.

Cleanliness of Milk.

Food and Drugs Act, 1955.

No samples of milk were taken during the year for laboratory examinations.

Pathogenic Organisms in Milk.

Food and Drugs Act, 1955.

Six samples were examined for the presence of paratyphoid organisms during the Arnside epidemic.

Three Notices were issued under the Milk and Dairies Regulations prohibiting persons from taking part in dairying activities.

Designated Milks.

Milk (Special Designation) Regulations.

Your District Council is responsible for the granting of dealers' and supplementary annual licences for the sale of designated milks. At the year end 20 dealers' licences and seven supplementary licences were in force.

Slaughterhouses.

Food and Drugs Act, 1955. Part IV.

Most of your District relies upon the public abattoir in Kendal, but your Council granted one licence for a private slaughterhouse in Kirkby Lonsdale to serve the Lune Valley areas. A scheme for

structural improvements was approved by the Minister of Agriculture, Fisheries and Food and the work was completed during 1956.

There are no knackers' yards in your District.

Condemnation of Meat at the Abattoir.

Food and Drugs Act, 1938. Section 10.

The following is a summary of the carcasses inspected and condemned in whole or in part:—

	Cattle excluding Cows	Calves	Sheep and Lambs	Pigs
Number killed (if known)	316	4	1,364	133
Number inspected ..	316	4	1,364	133
<i>All diseases except Tuberculosis and Cysticerci:</i>				
Whole carcasses condemned	—	—	1	—
Carcase of which some part or organ was condemned	30	—	—	1
Percentage of number inspected affected with disease other than tuberculosis and cysticerci	9.4%	—	.07%	17%
<i>Tuberculosis only:</i>				
Whole carcasses condemned	—	—	—	—
Carcasses of which some part or organ was condemned	8	—	—	1
Percentage of number inspected affected with tuberculosis ..	2.5%	—	—	7%
<i>Cysticerosis:</i>				
Carcasses of which some part or organ was condemned	14	—	—	—
Carcasses submitted to treatment by refrigeration	14	—	—	—
Generalised and totally condemned	—	—	—	—

Condemnation of Other Foods.

Food and Drugs Act, 1955.

The following foodstuffs were condemned during the year:—

Pork Luncheon Meat	...	...	...	...	8½ lbs.
Ox Tongue	...	...	...	...	38 lbs.
Chopped Pork and Tongue	...	...	...	...	14 lbs.
Liquid Frozen Eggs	...	...	...	...	28 lbs.
Gooseberries	...	...	...	...	6½ lbs.
Red Currant Jelly	...	...	...	...	8 ozs.
Crabmeat	...	...	...	...	6½ ozs.
Chopped Ham	...	...	...	...	12 ozs.
Vegetable Soup	...	...	...	...	15½ ozs.
Strained Prunes	...	...	...	...	5 ozs.

Method of Disposal of Condemned Food.

The Minister of Health requires me to describe the current methods for the disposal of condemned food. In this District it is by burial at Slackhead tip.

GENERAL INSPECTIONS.

Your Council employs one Chief Public Health Inspector and two additional Inspectors, one of whom is part-time with seven sessions per week. The salary is apportioned between the public health inspection duties and the other duties in a proportion approved by the Minister of Health. You receive through the County Council a grant of one-half of that apportionment of the salary allocated to public health inspection, and this should therefore be the basis upon which time is devoted to the various duties.

Summary of Inspections carried out during the year.

Dwelling-houses inspected with a view to Statutory Action under the Housing Acts	...	...	...	...	...	...	15
Dwelling-houses inspected with a view to informal action under the Housing Acts	...	...	...	...	...	...	64
Number of inspections for this purpose	...	...	...	...	...	...	153
Visits and inspections re Improvement Grants	...	...	...	...	...	...	77
General inspections and visits for nuisances (excluding above)	...	...	...	...	...	...	315
Visits and inspections re moveable dwellings and camping sites	...	...	...	...	...	...	50
Bakehouses inspected	...	...	...	...	...	...	14
Ice-cream premises visited and inspected	...	...	...	...	...	...	10
Factories and Workshops — visits and inspections	...	...	...	...	...	...	27
Inspections re drainage works — existing and new premises	...	...	...	...	...	...	486
Inspections and visits re private water supplies	...	...	...	...	...	...	12
Inspections re food preparing premises	...	...	...	...	...	...	53
Inspections re licensed premises	...	...	...	...	...	...	9
Visits and inspections re infectious diseases	...	...	...	...	...	...	129

Disinfections	...	...	...	...	...	...	...	...	15
Inspections re building works	...	...	...	...	...	...	...	...	498
Visits and inspection re temporary buildings	...	...	...	...	...	...	...	...	37
Inspections re accumulations	...	...	...	...	...	...	...	...	5
Visits and inspections re refuse service	...	...	...	...	...	...	...	...	94
Inspections re septic tanks	...	...	...	...	...	...	...	...	98
Visits and inspections re sanitary accommodation, privies, privy-middens, pails, w.c's	...	...	...	...	...	...	...	...	209
Visits to Slaughterhouse	...	...	...	...	...	...	...	...	119

Offensive Trades.

Public Health Act, 1936. Section 107.

There are no offensive trades in the District.

Factories.

Factories Act, 1937.

There are 146 factories on the Register. 38 inspections were made and three written notices were served. No references were made to H.M. Inspector and none were received from him. No prosecutions were required.

No lists of outworkers were supplied to your Council by factory owners, and I have no official knowledge of any cases of default in this respect.

There are no basement bakehouses in the District. Two certificates were issued during the year regarding means of escape from factories in case of fire.

Form 572 (revised) was sent directly to the Minister of Labour and National Service, giving details of your Council's administration of the relevant sections of Parts I and VIII of the Factories Act, 1937, in accordance with Section 127 of that Act.

It has not been possible in the past to perform these duties in an adequate manner, but it is hoped that next year may bring some improvement. Liaison with H.M. Inspector is very good and there is no reason to believe that factory conditions have suffered unduly by the arrears of work incurred.

Inspections.

Premises.	Number of Premises.	Number of		
		Inspections.	Written Notices.	Occupiers prosecuted.
Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities ..	47	28	3	—
Factories not included in (1), in which Section 7 is enforced by Local Authority	99	10	—	—
Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises)	—	—	—	—
Total	146	38	3	—

Cases in which Defects were found.

Particulars.	Number of cases in which Defects were found.				Number of cases in which prosecutions were instituted.
	Found	Remedied.	Referred		
			To H.M. Inspector.	By H.M. Inspector.	
Want of cleanliness (S.1) ..	1	1	—	—	—
Overcrowding (S.2) ..	—	—	—	—	—
Unreasonable temperature (S.3) ..	—	—	—	—	—
Inadequate ventilation (S.4) ..	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7)					
(a) Insufficient	—	—	—	—	—
(b) Unsuitable or defective ..	—	—	—	—	—
(c) Not separate for sexes ..	—	—	—	—	—
Other offences against the Act (not including offences relating to Out-work)	3	3	—	—	—
Total	4	4	—	—	—

Shops Act, 1950.

29 shop premises were visited during the year. These duties are not adequately covered due to the prior claim of other work.

Common Lodging Houses.

Public Health Act, 1936. Part IX.

There are no common lodging houses in your District.

Rent Restriction Acts.

No action was taken during the year and no rent book entries were reported to be irregular.

Smoke Abatement.

Public Health Act, 1936. Sections 101-106.

Informal action was required in two cases.

Rag Flock Act, 1951.

There is one registration.

National Assistance Act, 1948. Section 47.

It was not necessary during the year to deal with any cases requiring removal but two were under observation.

Such cases are extremely distressing to deal with and the course of compulsory removal is reserved to meet the emergencies of a last resort when all other methods of help have failed. Sometimes it is very hard to decide what is really in the best interests of the patient.

Laboratory Service.

National Health Service Act, 1946. Section 17.

The Laboratory attached to Westmorland County Hospital in Kendal provided many of the necessary examinations of material obtained by the Department. This laboratory has given extremely valuable service to the southern part of the County.

Byelaws.

Byelaws on public health matters are in force for :—

Buildings.

New Streets.

Drainage of existing buildings.

Slaughterhouses.

Tents, Vans and Sheds.

Food handling.

New Legislation.

Rent Act, 1957, became operative 6th July, 1957.

Rent Restriction Regulations, 1957, became operative 6th July, 1957.

Housing Act, 1957, became operative 1st September, 1957.

APPENDIX "A". **Laboratory Examination of Public Water Supplies.**

Nature of Test.	Standards Max.	Barbon	Burnside	Caster-ton	Garth Row	Gray-rigg	Kirkby Lonsdale	Lupton Raw	Lupton Treated	Staveley	Garnett Bridge
Pr. Coli count 37° Faecal coli/strep	3-10 0	180+ +	1 +	0	0	35 +	0	160 +	1 +	0	0
Character	—	Clear	Brown tinged with some suspended matter.	Clear	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Reaction pH.	—	7.5	7.0	7.2	6.9	8.0	6.5	7.4	8.0	7.3	8.4
Ammonical N.	.041	.025	Less than	.025	.025	.034	Less than	.08	Less than	.017	.045
Albuminoid N.	.066	.026	.08	.026	.056	.036	.04	.100	.025	.066	.075
Dissolved Solids.	1000	2	40	73	124	82	57	88	430	119	84
Hard-Total	300	44	27	45	42	39	80	36	50	64	14
Carbonate	—	12	11	6	3	3	26	7	18	1	0
Non-Carb.	—	32	16	39	39	36	54	29	32	63	14
Chlorides	30	11.0	8.0	10.0	11.0	9.0	11.0	11.0	9.0	9.0	6.0
Nitrates	1.0	—	—	—	—	—	—	—	—	—	—
Nitrites	—	—	—	—	—	—	—	—	—	—	—
O2 Absorbed	1.0	.25	.70	.28	.66	6.2	.25	1.23	2.64	.48	1.06
Heavy Metals	0	—	Iron trace	0	0	Iron trace	0	—	—	—	0
Rainfall, 24 hours	—	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Date Sampled	—	1/10/56	8/10/56	1/10/56	24/9/56	8/10/56	15/10/56	17/9/56	15/10/56	3/10/56	8/12/58
Laboratory	—	Carlisle	Carlisle	Carlisle	Carlisle	Carlisle	Carlisle	Carlisle	Carlisle	Carlisle	Carlisle

Chemical analyses are expressed in parts per million.

APPENDIX "B".

Housing Repairs and Rents Act, 1954 — Circular 55/54.

Parish	CLASS 5			Action Completed	Balance Outstanding	First 5 years Programme	Subsequent Action
	Houses in 1945	Add'nl Houses 1954	Total				
Arnside	—	—	—	—	—	—	—
Barbon	6	—	6	3	3	—	3
Beetham	30	—	30	25	5	—	5
Burton	29	—	29	15	14	7	7
Casterton	1	—	1	1	—	—	—
Crook	11	—	11	6	5	3	2
Crosthwaite	10	1	11	6	5	1	4
Dalton	1	1	2	1	1	—	1
Dillicar	3	—	3	1	2	—	2
Docker	—	—	—	—	—	—	—
Fawcett Forest..	1	—	1	1	—	—	—
Firbank	2	—	2	—	2	1	1
Grayrigg	2	—	2	—	2	—	2
Helsington	10	1	11	3	8	1	7
Heversham	—	2	2	2	—	—	—
Hincaster	2	—	2	2	—	—	—
Holme	8	—	8	5	3	—	3
Hugill	14	—	14	11	3	2	1
Hutton Roof ..	6	7	13	4	9	9	—
Kentmere	7	—	7	5	2	—	2
Killington	3	—	3	1	2	2	—
Kirkby Lonsdale	55	—	55	23	32	2	30
Lambrigg	—	1	1	1	—	—	—
Levens	33	3	36	21	15	9	6
Longsleddale....	—	—	—	—	—	—	—
Lupton	3	6	9	8	1	—	1
Mansergh	4	6	10	—	10	8	2
Meathop & Ulpha	—	3	3	3	—	—	—
Middleton	5	—	5	4	1	—	1
Milnthorpe	34	1	35	35	—	—	—
Natland	13	—	13	5	8	2	6
Nether Staveley	—	—	—	—	—	—	—
New Hutton	3	—	3	2	1	—	1
Old Hutton	19	1	20	10	10	9	1
Over Staveley ..	36	1	37	33	4	2	2
Patton	1	—	1	—	1	1	—
Preston Patrick	16	—	16	13	3	—	3
Preston Richard	7	4	11	11	—	—	—
Scalthwaiteirigg	—	—	—	—	—	—	—
Sedgwick	4	—	4	3	1	1	—
Skelsmergh	8	1	9	7	2	—	2
Stainton	14	8	22	22	—	—	—
Strickland Ketel	18	—	18	12	6	6	—
Strickland Roger	11	—	11	8	3	3	—
Underbarrow ..	4	—	4	3	1	1	—
Whinfell	—	1	1	1	—	—	—
Whitwell & Selside	2	—	2	—	2	2	—
Witherslack	11	—	11	2	9	7	2
TOTALS	447	48	495	319	176	79	97

